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Abstract
The conceptual understanding of student engagement entails a necessary relationship between institutions and individuals. Several decades of research have revealed the empirical relationship of student engagement and desirable student outcomes, as well as the myriad intervening factors that influence engagement levels. However, there is a critical gap in the research literature as to the specific programmatic features of college practices that best foster student engagement. In an era of dwindling resources and increasing demand for higher education access and student success, this understanding is critical for utilizing scarce resources and developing programs with the most impact. This essay argues that despite such *high impact* or *promising practices* continually studied and shown to have a high impact on student engagement levels, a more systematic investigation of these practices, structurally and collectively instead of topically, is needed to further our conceptual understanding of engagement and how to encourage it at the intersection of the student in the community college context.

A great deal of the research to date on student engagement—besides the development of its theoretical conceptualization, dating back to at least the 1980s if not decades before (Astin, 1984, 1985; Brophy, 1983; Fisher et al., 1980; Kuh, Whitt, & Strange, 1989; McIntyre, Copenhaver, Byrd, & Norris, 1983; Pace, 1984, 1985)—has focused largely on exploring, quantifying, and explaining the relative impact of various factors on levels of student engagement, whether they be individual or contextual. Thanks to this research, much is known about the factors that influence and mediate levels of student engagement for individuals and groups. Despite this wealth of knowledge, student engagement remains largely inscrutable in terms of where, how, and under what circumstances engagement most readily occurs. The very programs designed to foster engagement, with their various components, intensity, duration, and target participants, remain unscrutinized in the literature beyond case studies or single contexts, relying too often on cross-sectional or aggregate data (Jenkins, 2011). Engagement remains as a black box, as it were, in the midst of the factors that influence it.

This essay aims to illustrate the need to open that black box to discover more fully the structural and conceptual form of college practices in creating engaging environments.

This research is needed to promote theoretical and practical knowledge regarding how to structure community college practices to create quality experiences for all students. In an era of dwindling resources, and a policy environment that increasingly emphasizes student outcomes and success in addition to the traditional focus on college access, it is imperative to better understand the features of programs and practices that foster student success. I will first discuss historical definitions and a working definition of engagement, provide a conceptual framework in terms of this definition, and then describe the study of engagement in context of modern community college reform. Finally, I will discuss the state of the art of the study of engagement programs and practices, the challenges with identifying promising practices as an object of study, and finally propose a way forward.

The Definition and Study of Student Engagement

Whereas some researchers have defined engagement as students' cognitive, metacognitive, and self-regulatory strategies to pursue difficult learning tasks (Butler, 2011; Chapman, 2003; Natriello, 1984; Pintrich & DeGroot, 1990; Skinner & Belmont, 1993), Astin (1984) and Kuh (2003a, 2003b, 2009) have argued that engagement should be primarily defined in terms of what students do to enhance their learning and development, rather than in terms of unseen cognitive strategies or motivational aspects of their behavior. As used in this essay, student engagement is understood to mean "the time and effort students devote to activities that are empirically linked to desired outcomes of college and what institutions do to induce students to participate in these activities" (Kuh, 2009, p. 683). In this sense, engagement is measured not only in terms of student and institutional behaviors, but also by its conceptualization as a phenomenon that emerges and exists at a social intersection, which is dependent on time, place, and interpersonal interactions.

It is not only important to understand how engagement is defined, but also why it is preeminent in higher education research. In straightforward terms, student engagement has received a great deal of attention in the research literature since the 1990s because of the robust correlations found between measures of student involvement in a subset of educationally purposive activities and positive outcomes of student success and development (Trowler, 2010). Indeed, Hu and Kuh (2002) unambiguously state that the most important factor in student learning and personal development during college is student engagement. Engagement is positively related to both objective and subjective measures of gains in skills, critical thinking, satisfaction, persistence, academic achievement, graduation, and social engagement, among other outcomes (Astin, 1977, 1984, 1985, 1993; Berger & Milem, 1999; Chickering & Gamson, 1987; Endo & Harpel, 1982; Gellin, 2003; Goodsell, Maher, & Tinto, 1992; Kuh, 1995; Kuh, Kinzie, Schuh, & Whitt, 2005; Kuh, Pace, & Vesper, 1997; Marti, 2009; Pace, 1995; Pascarella, Duby, Terenzini, & Iverson, 1983; Pascarella & Terenzini, 2005; Pascarella, Wolniak, Cruce, & Blaich, 2004; Pike & Kuh, 2005; Pike, Kuh, & Gonyea, 2003; Sorcinelli, 1991; Trowler, 2010).

Student engagement has received this level of attention in the literature and among practitioners thanks in large part to the scholarship and advocacy of such initiatives as the National Survey of Student Engagement (NSSE) for four-year colleges and universities, the Community College Survey of Student Engagement (CCSSE) in the two-year sector; as well as the Australian Survey of Student Engagement (AUSSE). These surveys—sometimes referred to collectively as *SSE initiatives* for short—were born in the first years of

the 21st century under the patronage of charitable foundations and under the leadership of higher education scholars in order to offer a gauge and assessment tool for the quality of the undergraduate experience instead of traditional measures based on exclusivity, reputation, and financial resources (Kuh, 2003a). In addition, these surveys offer a means for examining the incidence of effective educational practices and the relative experiences of different groups on campus so that college leaders can enact plans to increase college effectiveness and reinvent practices based on evidence (McCormick & McClenney, 2012).

A Conceptual Framework for Engagement at the Intersection of Students and Institutions

Data from these surveys and related studies have led to the aforementioned discussion in the literature over the last decade that considers the factors that influence engagement and the role of engagement in student success in general. Kuh, Kinzie, Buckley, Bridges, and Hayek (2006) propose a conceptual framework that summarizes many of the known influences on student success and takes into account the viewpoint that students and institutions share the responsibility for engagement. In their framework, reproduced here as Figure 1, student engagement occupies the central space within the sphere of what matters to student success.

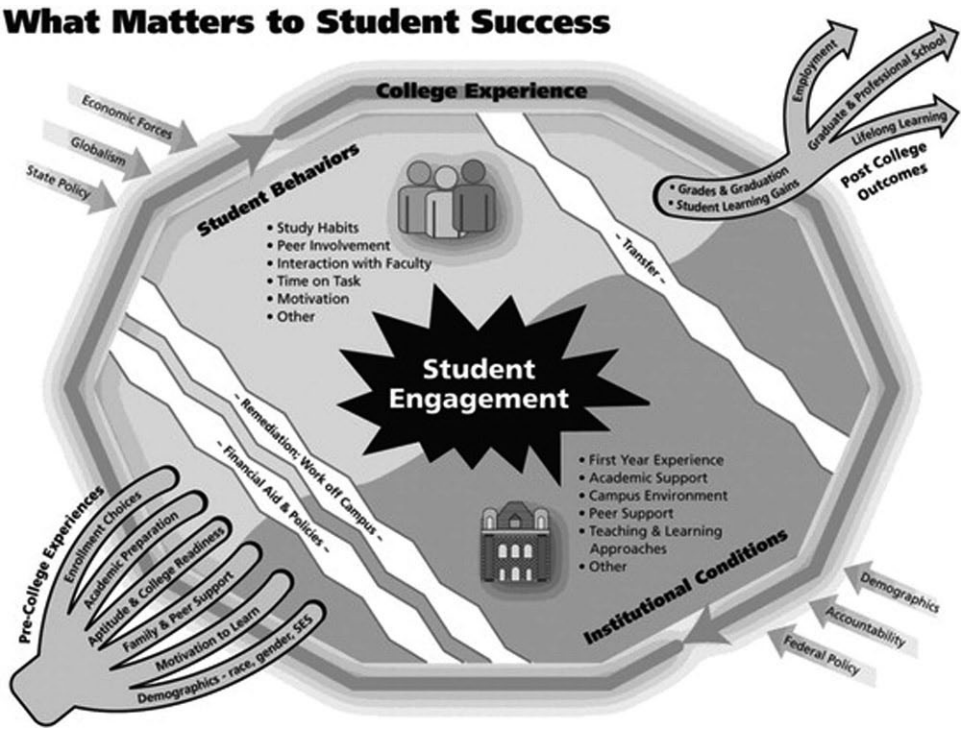

Figure 1. Conceptual framework of what matters to student success (Kuh et al., 2006). Used by permission of the authors.

For these authors, student engagement is key to what matters to student success precisely because it involves aspects of both student behavior and institutional performance which colleges and universities can do something about ''at least on the margins,'' in the words of Kuh et al. (2006, p. 8). Naturally, many factors—such as student characteristics and precollege experiences—are beyond the control of the institution. But they certainly come into play where college programs and policies are enacted in response to them—for example, in the case of such practices as placement testing, early college orientation, or targeted support programs for certain at-risk of students, to name a few.

This model, like even the earliest theoretical frameworks of student involvement and engagement primarily originates separately from the works of Astin, Kuh, and Pace. It reflects the proposition that ''even though the focus is on student engagement, institutional policies and practices influence levels of engagement on campus'' (Pike & Kuh, 2005, p. 186). The model captures many of the known student factors and institutional characteristics that play a role in engagement, but engagement itself remains an amorphous entity at the center. The authors of this model most likely left student engagement thus unspecified deliberately, in part given that principles of engagement can be applied in nearly all settings of a college, infused throughout its culture, and enacted in its policies. The resulting graphical representation—perhaps inadvertently— reveals the state of the art in engagement research overall: individually, practices and programs have been studied in relation to engagement; but collectively or in combination, they are largely unscrutinized. The model, therefore, reflects the black box that is student engagement at the intersection of student background, behavior, and institutional contexts.

Student Engagement in the Context of Modern Community College Reform

In order to analyze the structural relationship of college practices and student engagement, it is important to consider the rhetorical setting in which the idea of student engagement arose. Some view the ascension of engagement to prominence in the literature as one of a series of topical foci promulgated by those aiming to enhance learning and teaching in higher education in an era of increasing austerity. In such an environment, institutions are looking for a ''magic wand'' for ''attracting and retaining students, satisfying and developing them, and ensuring they graduate to become successful, productive citizens'' regardless of where they came from or where they chose to study (Trowler, 2010, p. 2).

For example, critics of the SSE initiatives, such as Olivas (2011), focus attention on the rise of national student engagement surveys amidst ''the tidal wave of the NCLB-related ethos'' in higher education ''where assessments matter at all levels'' (p. 2) and raise concerns that perhaps the current discourse on engagement may, in fact, do harm to the reform of community colleges and higher education. Other recent critiques have focused on such concerns as the following: the construct validity of SSE measurement scales, especially as evidenced through alternate analyses at the local level; their level of intercorrelation, suggesting they might not measure distinct aspects of student engagement as they propose to; the extent to which they predict desirable student outcomes; psychometric properties of the survey items; and arguments that SSE measures in general are culturally specific and socially exclusionary (Angell, 2009; Campbell & Cabrera, 2011; Dowd, Sawatzky, & Korn, 2011; Hagel, Carr, & Devlin, 2012; Nora, Crisp, & Matthews, 2011; Porter, 2011; Porter, Rumann, & Pontius, 2011; Roman, 2006; Roman, Taylor, & Hahs- Vaughn, 2010; Shinde, 2008).

Whether these concerns rise to the level of causing such harm that Olivas (2011) contends they do is not entirely certain. It is also certainly debatable whether researchers, administrators, and policy makers actually put as much stock into their ability to extract such great utility out of current SSE measures as Olivas and others would suggest. This is because the surveys are designed and encouraged to be used not as delivering measurements that stand on their own, but as vehicles for further investigation and discussions within institutions and systems.

Indeed, the nature of the SSE measures is, in reality, quite the contrary to their often misconstrued purpose. CCSSE benchmarks, for example, serve the purpose of giving a broad picture of engagement levels, especially in comparative terms between groups. The benchmarks have a utilitarian or heuristic purpose as entry points into the data and serve as tools for fostering needed conversations among faculty and administrators and even community and governance bodies that focus on matters related to the teaching and learning and outcomes of the college experience. This is fundamentally different from the way scales and constructs should be used in sociological, psychological, and educational research. Researchers for their part must also keep the distinction in mind when attempting to utilize these data for their purposes (Ewell, McClenney, & McCormick, 2011; Marti, 2004; McCormick & McClenney, 2012).

For many practitioners, policy makers, and researchers, the questions that CCSSE leads them to investigate in modern times increasingly turn to matters of successful student progression toward completion. Whereas access to college was formerly the primary concern of community colleges, it is no longer the most pressing concern in the current policy environment (Bueschel, 2009). There is increased recognition of the failures of the system to ensure success of the same students whose access has been prioritized in years past: that is, there is a large open door, but too many obstacles for too many students to reach the exit marked graduation. Much of the attention on success has come in light of findings that, for example, ''states appropriated almost $6.2 billion to colleges and universities to help pay for the education of students who did not return for a second year'' and that ''states gave over $1.4 billion and the Federal government over $1.5 billion in grants to students who did not return for a second year'' (Schneider, 2010, p. 1). The emerging shift in policy is referred to as the new *completion agenda* (Humphreys, 2012; Schneider, 2010), and it is a powerfully felt ethos, as any review of recent conference programs from higher education professional and academic associations will attest. For example in the scholarly field there were more than a dozen division highlights and sessions and several dozen individual presentations on completion and success in secondary education at the 2011 annual meeting of American Educational Research Association. And at the 2011 annual conference of the Association for the Study of Higher Education, there were half a dozen named session themes and a dozen presentations specifically regarding completion or success.

Many institutions, charitable organizations, and other organizations, therefore, have naturally undertaken campaigns to develop programs, restructure colleges, and create incentives to foster student engagement and success. Much of these recent conversations have focused on a specific set of programmatic features that almost have taken on a life of their own in discussions of higher education reform and innovation. These *best practices*, *promising practices*, or *high impact practices* have received much scrutiny in the literature individually, but little scrutiny collectively, in large part because just what is a promising practice is not at all clear. Commonly cited practices for community colleges include the following, among others: robust assessment and placement; orientation; academic goal

setting and planning; registration before classes begin; accelerated developmental education; first-year seminars; student success courses; learning communities; class attendance policies; alert and intervention systems; experiential learning beyond the classroom; tutoring; and supplemental instruction (Achieving the Dream, 2011a; Center for Community College Student Engagement, 2012; Schwartz & Jenkins, 2007). Though many of these programs have existed for many years, often being adopted and adapted from four-year college contexts, only recently have they received widespread attention in the community college sector as administrators and policy makers have strived to reform and reinvent these institutions.

The Lack of Systematic Study of Institutional Programs and Structures

Institutional contexts in general, and practices in particular, have for years been central to the concept of student engagement. However, the variety of activities, at least in the form of programs and institutional structure, that contribute to engagement have been largely uninvestigated. For example, Chickering and Gamson's (1987) ''Seven principles for good practice in undergraduate education''—which certainly informed the foundations of engagement benchmarks as later developed by groups such as NSSE and CCCSE—singles out programmatic interventions such as learning communities, life-career-educational planning courses, and first-year seminars, as exemplifying the kind of environments that foster engagement. But it does so without suggesting these programmatic structures be investigated specifically.

This posture is certainly understandable in such an early and foundational piece on engagement, but it is true that nearly all publications since have treated programmatic elements in a similar manner, as mainly examples of contexts. If such contexts have so often been named, why have they not been closely examined analytically and collectively for their content, structure, or extent of implementation as it relates to engagement? Besides measuring the relationship of desirable student outcomes with these programs individually (which indeed has been extensively done through such undertakings as the National Survey on First-Year Seminars, the Learning Communities National Resource Center, the Parsing the First Year of College project, among others [cf. National Resource Center for the First-Year Experience and Students in Transition, 2002; Shapiro & Laufgraben, 1999; Terenzini & Reason, 2005]), can the structure and elements of these programs in general vis-a`-vis outcome measures, including engagement, be empirically identified across programs and not only enumerated as examples of the context for effective practice? Can common structural elements and their combinations be linked to engagement and outcome measures regardless of the name of the practice or program that they compose?

There are some very good reasons why this approach is not a common one in the literature. On the one hand, programs are as diverse as any organic sociological phenomenon. Therefore, they are problematic at best and—antithetical at worst—to comparisons across contexts. On the other hand, theoreticians have understandably veered clear of programmatic conceptualizations of student engagement, preferring instead to seek out principles of student engagement in order to construct conceptualizations of student engagement common to all contexts. These challenges are as much practical as they are epistemological. This is because there is no common or well-supported framework for how to analytically define these practices and programs as a group regardless of their names and, in turn, how to go about investigating them if not topically and separately. Programs going

by different names at different colleges vary widely in their design, duration, and intensity. Whether it is called a learning community, life-career-educational planning courses, first-year seminar, extended orientation, or accelerated developmental/remedial education program, to name a few, they might look surprisingly similar under the hood. Alternately, they may hide drastic differences that are not apparent in the labels.

I propose that with so many years of continually naming the same programs again and again as emblematic of fostering student engagement, it is time to break with their topical treatment and consider them more structurally, systematically, and collectively. At the risk of casting student engagement in programmatic terms—that is, solely as a function of specific programs—payoff may be in greater understanding of which aspects and activities, for whom, and which environments, and for whom, most readily foster student engagement. This may be an approach for tracking down the ''different complementary or alternate causal strands involved in achieving the outcomes'' (Rogers & Weiss, 2007, p. 64) that both institutions and theoreticians are seeking. In this way, our understandings of student engagement can lead to informed evaluation and incentivization of institutions and programs for the sake of improving student success for all at all levels of higher education (cf. Chen, 1990; Lipsey, 1993; McClintock, 1990; Weiss, 1997).

Identifying Promising Practices

As the research community continues to investigate new programs and practices and how to bring them to scale, it is imperative that we step back and question the assumptions undergirding the use of the terms promising practices and high impact practices. There is a risk that they will become buzzwords, devoid of substantial meaning. For example, few sources, regrettably so in the academic literature, critically examine the essential nature of what a high impact or promising practice really means. Some sources use the term best practices as often borrowed—far too often some would argue—from a corporate frame of reference, via the marketization of education (Bousquet, 2008). The idea of a best practice seems simple enough. Any processes, practices, or systems that are widely recognized as improving an organization's performance and efficiency should be shared and emulated, according to this thinking. However, given that ''extant evidence almost never supports the *best* descriptor, particularly given issues of quality of implementation across wildly different institutional contexts'' the term has been used ''in too many educational circles ... without benefit of empirical support or standards of evidence'' (K. McClenney, personal communication, December 9, 2010). Terenzini, too, has stated his reservations: ''I've been suspicious about best practices for a number of years because I don't think those practices are transplantable with great success. There are some exceptions. But organizations, colleges and universities, like the human body, have certain antibodies that resist transplantation from the outside'' (Terenzini, 2011, para. 9). Despite the variability of program implementations and the fallacy of program generalizability in disparate contexts, the push for successful reformation demands fundamental principles and empirical evidence of practices that can effect that reformation. In short, a search for promising practices.

Partly in response to the indiscriminant use of the term, the national Achieving the Dream initiative, a nonprofit reform movement for community college student success that develops the capacity of participant colleges to build a culture of evidence, has defined very specific parameters within a rigorous framework for determining what might be called promising (Achieving the Dream, 2011a, 2011b, 2011c; Brock et al., 2007; Zachry

& Schneider, 2008). This framework requires a college to gather extensive empirical evidence to deem a practice as promising. For Achieving the Dream, promising practices are sought and defined at the local level and include both formal structured student programs, in addition to administrative processes such as budget allocations, based on evidence of academic program effectiveness. Even when a college identifies a promising practice, it is understood within this framework that it is still short of proven effective and far short of best. Due to this very cautious and institution-focused approach that Achieving the Dream takes to institutional reform in its many instantiations, it does not allow one readily to generalize to other contexts or conceptualize a scheme for describing programmatic interventions collectively. One thing it does do is exemplify how to understand the meanings of promising, effective, and best so that terms are not casually used and, therefore, overused.

The approach of Achieving the Dream underscores the principle that no matter the particular design of these practices, it is important to keep in mind that what matters to structured and intentional student-centric practices are its features or design principles, not necessarily the particular form, name, or iteration of a program (Kuh, 2011; Lardner, 2011; Terenzini, 2011). What makes a difference, according to Kuh (2011), is that teachers and students are in a position of interacting on substantive matters. Indeed, these kinds of activities or features—such as active learning or providing feedback—can be intentional and added to any classroom situation. What a high-impact practice does is provide a vehicle to enable meaningful interaction. Kuh emphasizes that, in his reading of the literature, the impact is greater when substantive interaction activities are bundled together in structured ways. Terenzini (2011) underlines the importance that we ''[do] not get zeroed in on finding the silver bullet. There aren't any. The effects of college are cumulative across the range of activities and a range of programs.'' Although interinstitutional studies of programs have their limits, a more elemental study of programmatic features across programs, even with its own set of limitations, may provide a way forward.

Kuh (2011) points out that ''we need to re-channel, stop doing some of the things we are doing now that aren't working well.'' I argue that to know which direction to take, we need to open the black box of student engagement, as it were, at the heart of the intersection of institutional conditions and student behaviors in order to understand which aspects of which programs in which situations are worth getting behind and learn how to make them scalable and sustainable. This is a way forward if we hope to make fundamental, systemic changes in higher education that are based on sound empirical evidence. That is, there is much evidence of what works for student success, but what is needed is having a clearer picture of how these things combine and how to use scarce resources to the most effect.

Where to from Here? Combinatorial Effects and Triangulation

In this essay I have argued that with more than a decade of sustained on-going research into student engagement, there is much that is known about how individual and institutional factors mediate engagement levels. There is also much known about general design principles for teaching, learning, and orienting that work in a number of situations to foster engagement. But in the modern era of community colleges pushed by a completion agenda to increase student success and to answer demands for increased accountability, despite decreased funding, it is important now to investigate more closely the detailed structural and programmatic contexts of engagement in order to bring them to scale. This knowledge is necessary for practitioners to design and implement programs that foster

high levels of engagement for all students. Such knowledge is also necessary for theoreticians to advance the conceptual understanding of engagement itself. The literature documents a slew of practices and principles that, individually, have proven to be empirically related to engagement, but little is known about the combined effects of these programs or their components across multiple contexts. All of this means that if institutional programs and practices are to be examined regarding their relation to student engagement, it must be done at two levels: a fine-grained dimension of programmatic elements on the one hand; and a broad, multi-institutional dimension on the other so that local idiosyncrasies of program implementation can be averaged out and commonalties may emerge.

It is critical to formulate research methods that consider the cumulative and compounding effect of programs and institutional alignment of programs, as has been pioneered by Bradley Cox and his associates (Cox, McIntosh, Reason, Terenzini, & Brower, 2011) wherein they have shown the effect on engagement due to coordination between student and academic affairs across institutions. Another example of this approach is in Lehmuller's (2010) dissertation on the effect of combinations of programmatic interventions on student engagement and retention.

Another example of the way forward in a programmatic study of engagement comes from a special study by the Center for Community College Student Engagement (2010, 2012), now under way, on identifying and promoting high-impact practices in community colleges. The center's approach is to examine and cross reference the perspectives provided by the following: (a) students in general, through its main CCSSE instrument, regarding their overall experience; (b) first-time entering students, through the Survey of Entering Student Engagement (SENSE), regarding their earliest interactions; (c) part-time and full-time faculty, through the Community College Faculty Survey of Student Engagement (CCFSEE), regarding faculty perceptions of their students; and (d) institutional administrators, through the new Community College Institutional Survey (CCIS), regarding the structure and implementation, if any, of selected practices (Center for Community College Student Engagement, 2012).

Part of the CCIS instrument involves the enumeration of more than 20 curricular and programmatic elements—such as linked courses, common readings, peer tutoring, study skills, and test taking skills, to name a few—thatmight contribute structured group learning experiences whether they be called, for example, first-year seminars, learning communities, orientation, and so on. In this way, the relationship of engagement and practices can be teased out by examining the experiences of thousands of students within programs across scores of colleges nationwide, while controlling for student characteristics, institutional characteristics, and programmatic differences including program intensity and duration. Inasmuch as these relationships can be accounted for over these several contexts, the relative impact of certain features may be able to be ascertained. The center promises a series of reports in the upcoming years on the data they are collecting for such group learning experiences and other practices as well. These studies and similar initiatives are worthy of pursuit to meet the challenges of community college innovation. Though the systemic relationship of institutions and individuals with respect to engagement is tangled and immensely multifaceted, we can no longer shy away from the challenge of prying open the black box it remains today.

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